

US EPA RECORDS CENTER REGION 5



410968

## **Explanation of Significant Differences**

Southeast Rockford Groundwater Contamination  
Source Area 4 Soil Remediation

## **Introduction to the Site and Statement of Purpose**

The Illinois Environmental Protection Agency (Illinois EPA), in consultation with the United States Environmental Protection Agency (U.S. EPA), is issuing this Explanation of Significant Differences (ESD) to document a change in the remedy to address soil contamination at Source Area 4 of the Southeast Rockford Groundwater Contamination Superfund (Southeast Rockford) site in Rockford, Winnebago County, Illinois (see Figure 1). Source Area 4 is shown in Figure 2. Illinois EPA and U.S. EPA are modifying the selected remedy for the impacted soils within Source Area 4 to include an in situ remedy to treat the principal threat waste that serves as a source of groundwater contamination. Selection of the existing remedy was documented in the Operable Unit #3 Record of Decision (ROD), which was signed by U.S. EPA on June 11, 2002.

Illinois EPA and U.S. EPA have determined that the modified remedy will result in a simpler, more effective, and less costly remedy implementation with reduced risk to the public and site workers while enhancing the groundwater restoration process.

Illinois EPA and U.S. EPA are modifying the selected remedy for the impacted soils within Source Area 4 pursuant to Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. §§ 9604, 9607 and 9622, and the National Contingency Plan (NCP), 40 C.F.R. Part 300. CERCLA Section 117(c), 42 U.S.C. Section 9617(c), and 40 C.F.R. 300.435(c)(2)(i) of the NCP authorize the publishing of an ESD when the differences in the remedial action to be taken significantly change, but do not fundamentally alter, the remedy selected in the remedial decision. More fundamental changes would require an amendment to the remedial decision.

Environmental problems at the Southeast Rockford site are complex as a result of the intermixing of residential, commercial, and industrial development throughout this area and a history of commercial solvent spills creating contaminated soil and a widespread volatile organic compound (VOC) groundwater plume. As a result, Illinois EPA and U.S. EPA organized the site cleanup work into three portions, termed “operable units,” as follows:

Operable Unit #1: Contamination in Residential Wells - Alternate Water Supply - Initial Extension of Alternate Water Supply

Operable Unit #2: Additional Alternate Water Supply Extension - Selection of Natural Attenuation with Establishment of Groundwater Monitoring Network to Achieve Overall Contaminated Plume Remediation - Commitment to Reduce Impact of Significant Source Areas

Operable Unit #3: Source Control Technology Selected for Four Leading Source Control Areas - Extent of Contaminated Soil Areas/Local Groundwater Management Zones Established

Source Area 4 is one of the four significant groundwater contamination source areas as described in the June 2002 Record of Decision (ROD) for Operable Unit #3. Further source control in these four areas would help reduce continued migration of contaminants into the overall plume of

contamination as established in Operable Unit #2, and aid in reducing the time needed to achieve overall aquifer restoration goals.

The June 2002 ROD for Source Area 4 identified *ex situ* thermal remediation through excavation and onsite low-temperature thermal desorption (LTTD) as the appropriate remedy for the contaminated soils impacting the groundwater. As a result of pre-design/pilot study work conducted from 2004 to 2006 and the recent pre-design activities to evaluate an alternative remedy, it has been established that the volume of soil to be treated is approximately double the original estimate due to significant contamination extending below the footprint of the building onsite. The excavation of the soils beneath the building and excavation to the required depth under the parking lot present significant construction challenges and increased costs. Source Area 4 space limitations will also present significant challenges for implementation of an excavation remedy and increase the time required to conduct the remedy due to staging requirements. Illinois EPA and U.S. EPA have determined that employing Electrical Resistivity Heating (ERH), an *in situ* thermal remedy for the soils, would eliminate these challenges and decrease cleanup costs. ERH is capable of achieving the same or better results with significantly less health and safety issues to construction workers and the public during implementation at a lower cost than the remedy as outlined in the June 2002 ROD.

The proposed change from an *ex situ* to *in situ* thermal soil remedy does not fundamentally alter the previously selected remedy for Source Area 4 as discussed in the June 2002 ROD. Therefore, a ROD amendment is not required and the change can be effected via this ESD. This ESD will become part of the administrative record file for the Site, as noted in the NCP at 40 C.F.R. 300.825(a)(2).

The Illinois EPA is the lead agency for the Source Area 4 portion of Operable Unit #3; U.S.EPA is the support agency.

The Site administrative record file and site repositories may be found at the Springfield, Illinois and Chicago, Illinois offices of the Illinois EPA and U.S. EPA, respectively:

U.S. EPA Records Center  
77 W. Jackson Blvd.  
Room 7 South  
Chicago, IL 60604 (Administrative Record)  
Hours: Monday to Friday 8:00 am to 4:00 pm

Illinois EPA  
Bureau of Land  
1021 North Grand Avenue East  
Springfield, Illinois 62702 (Administrative Record)  
Hours: Monday to Friday 8:30 am to 5:00 pm

In addition to the Springfield, Illinois and Chicago, Illinois offices of the Illinois EPA and U.S. EPA, respectively, the site administrative record file and site repositories may be found locally at:

Rockford Public Library - Main Branch  
215 North Wyman Street  
Rockford, Illinois (Administrative Record)

### **Site History, Contamination, and Selected Remedy**

The Southeast Rockford Groundwater Contamination (Southeast Rockford) site (CERCLIS ID. No. ILD981000417) (Site) is located within the southeast portion of the City of Rockford, Winnebago County, Illinois, and consists of an area approximately 3 miles long by 2.5 miles wide.

The Site was proposed for addition to the National Priorities List (NPL), 40 CFR Part 300, Appendix B, in June 1988, and was listed on March 31, 1989, 54 Fed. Reg. 13,296. This listing stemmed from a 1981 discovery of groundwater problems at the site by the State of Illinois. In 1989, U.S. EPA initiated a Superfund time-critical removal action to place residents with VOC contamination in their drinking water wells equal to or greater than 25% of removal action levels under CERCLA, on bottled water as a temporary measure. In December 1989, the same residents received point-of-use carbon filters from U.S. EPA. Ultimately, U.S. EPA extended water mains and provided service connections for 283 residences as part of the removal action. This action was completed in 1991.

Illinois EPA began the Operable Unit #1 Remedial Investigation/Feasibility Study (RI/FS) in 1990. U.S. EPA and Illinois EPA developed a proposed plan for Operable Unit #1 in March 1991. The ROD for Operable Unit #1 was signed on June 14, 1991. The Operable Unit #1 ROD required additional affected area residences to be hooked into the City of Rockford municipal water system, and required a granular activated carbon water treatment unit be installed at a Rockford municipal well contaminated by VOCs. Including the previous residences covered by the U.S. EPA time-critical removal, by November 1991, 547 residences and homes were hooked up to Rockford municipal water. In December 1992, U.S. EPA issued a Remedial Action Report certifying that the selected remedy for Operable Unit #1 was operational and functional.

Remedial Investigation (RI) required for Operable Unit #2 began in May 1991 under direction of the Illinois EPA. The objective of Operable Unit #2 RI was to characterize the nature and extent of groundwater contamination throughout the Site, and to develop information on the source areas of the residential well contamination. Phase II activities included soil gas points, soil borings, installation of groundwater monitoring wells and groundwater sampling. Remedial Investigation field activities were completed by 1994, resulting in the Illinois EPA issuing a Proposed Plan for Operable Unit #2 in July 1995. Phase II identified 4 major source areas that were impacting the Site, identified as Source Areas 4, 7, 9/10 and 11. The ROD for addressing Operable Unit #2 was signed on September 29, 1995. It required further water hookups for homes and businesses projected to be in the overall Site area affected by contaminated water. In

addition, it proposed groundwater monitoring for 205 years along with future source control measures to be developed for the four groundwater contamination source areas, including Source Area 4. In January 1995, Illinois EPA issued the Groundwater Remedial Investigation Report which summarized the findings from the Phase II field activities that were conducted from January 1993 through January 1994.

In May 1996, Illinois EPA began the Operable Unit #3 RI/FS which was designed to characterize the nature and extent of contamination at the four primary source areas. The RI/FS involved soil gas sampling, soil borings, well installation and groundwater sampling for the Southeast Rockford Groundwater Contamination Site. The results of the Operable Unit #3 RI/FS characterized the four major source areas, including Source Area 4. These findings and determinations are described in the June 11, 2001 Proposed Plan for the ROD in the Description of Source Areas. Illinois EPA and U.S. EPA hosted a number of public informational meetings during summer 2001 in order to explain and take comments on the Proposed Plan. During fall and winter 2001, Illinois EPA and U.S. EPA prepared Responses to Comments in anticipation of issuing a ROD in spring 2002. The Operable Unit #3 ROD was issued on June 11, 2002.

Source Area 4 is situated in a mixed industrial, commercial, and residential area of Rockford, located east of Marshall Street and south of Harrison Avenue. Source Area 4 is comprised of a building and associated parking area that housed a former machine shop (Swebco Manufacturing, Inc.) located at 2630 Marshall Street as shown in Figure 2. Currently, the building is occupied by a wood pallet manufacturing and refurbishing business. The subsurface of Source Area 4 consists of sand to a depth of approximately 60 feet below ground surface (bgs). The sand is generally fine- to medium-grained down to approximately 30 feet bgs and medium- to coarse-grained below 30 feet bgs. Several feet of silty topsoil are at the surface in most areas. The depth to groundwater is approximately 30 feet bgs and groundwater flow beneath Source Area 4 varies toward the west and northwest.

The remedial technologies selected for Source Area 4 within the ROD are excavation and onsite LTDD for soils and hydraulic containment for groundwater, as described in the ROD. The groundwater remedy also includes groundwater use restrictions as an institutional control. The combination of these methods was originally designed to achieve substantial risk reduction by removing the source material that constitutes principal threat waste, as well as capturing contaminated groundwater migrating from the source material.

In 2003, an indoor air sampling study was conducted at Source Area 4 using more recently developed soil vapor intrusion modeling guidelines to follow up on indoor air sampling conducted in 1993 during the RI. The 2003 indoor air evaluation indicated that the migration pathways are generally inadequate or incomplete and do not result in indoor air concentrations at levels that present an unacceptable health risk. Vapor intrusion into a home near Source Area 4 that typically had the highest concentrations of contaminants in indoor air during the study was determined to be the likely result of a former well pit in the basement. The well pit was subsequently sealed.

In 2004, Illinois EPA began conducting pre-design soil and groundwater sampling for the remedial design (RD). Soil samples collected from the Swebco parking lot were field tested with an organic vapor meter (OVM) and a dye test. Results indicated the presence of free product in primary and secondary source soils and identified the Swebco loading dock area and an area beneath the existing building as sources of contamination at Source Area 4. Primary source soils are defined as those in the area of the former Swebco loading bay and loading dock. These soils are contaminated from just below ground surface down to the water table with heavy staining and free product. Secondary source soils are defined as those in the asphalt parking lot west of the former loading dock where the contamination exists as a non-aqueous phase liquid (NAPL). These soils are adjacent to the water table (30-42 feet bgs) and are generally contaminated with free product as 1,1,1-trichloroethane (TCA) and residual concentrations of TCA and smaller amounts of other VOCs due to a smear zone created by groundwater fluctuations. The major contaminant of concern (COC) for Source Area 4 soil is TCA. The VOCs were mobilized from the primary source area by the migration of groundwater in the northwest direction. There is only minor contamination above or below this zone.

In 2005, several additional borings were advanced at the Swebco site and several offsite monitoring wells and one onsite multi-level monitoring well were installed for the final leachate RD. Results of sample analyses confirmed that most soil and groundwater contamination at Source Area 4 occurred within the top 10 feet of the aquifer.

In September 2005, approximately 185 cubic yards of contaminated soil were excavated from the Swebco loading dock area to 3 feet bgs to reduce the human exposure potential to contamination just below ground surface. The excavated area was backfilled with clean gravel.

During July and August 2006 a pump test was conducted at Source Area 4 to obtain hydrogeologic data for the hydraulic containment component of the selected alternative. In general, the pump test revealed that the upper portion aquifer at Source Area 4 is highly conductive with an estimated hydraulic conductivity of 150 ft/day ( $5.3\text{E-}2$  cm/sec).

The remedial action (RA) for the leachate containment and treatment component started in December 2009 with the treatment unit startup. The unit was declared operational and functional in October 2010 and is in long-term remedial action (LTRA). A groundwater management zone (GMZ) has been established for Source Area 4 to assist in effectively monitoring the effectiveness of the remedy. The system rapidly achieved significant reductions in contaminant concentrations immediately downgradient of the system and concentrations in point of compliance monitoring wells have been below regulatory standards since July 2011. This indicates that the LTRA is effectively preventing the continued migration of contaminated groundwater from Source Area 4. However, groundwater extracted by the system continues to exhibit contaminant concentrations well in excess of regulatory standards indicating that Source Area 4 continues to be a source of groundwater contamination.

Because waste remains in place at Source Area 4, as well as the other source areas, the Southeast Rockford site is subject to the need for five-year reviews. The previous five-year reviews were conducted in 1998, 2003 and 2008.

Additional information concerning the scope of contamination and remedy development may be found for all Site operable units and source areas in the Administrative Record file and in the ROD database as maintained by Illinois EPA and U.S. EPA.

#### **Basis for the Document - Source Area 4 Information**

Upon completion of the pre-design sampling for the alternative remedy evaluation conducted in October 2011, it was found that the extent of the TCA contaminated soil increased from a previous estimate in March 2011 to include a larger area (and volume) to the east. The extent remained approximately the same along the west edge of the contaminated area. In total, the extent of contamination consists of approximately 1,345 square feet below the existing building at a depth between 12 and 37 feet bgs, approximately 1,284 square feet along the grass area to the west of the building at a depth between 4 to 37 feet bgs, and approximately 5,894 square feet within the parking area to the west at a depth between 25 to 37 feet bgs. The total treatment area (or extent of contamination) is approximately 8,523 square feet and the total treatment volume is approximately 5,800 cubic yards, based on the approximate vertical distribution of contaminants requiring remediation. This treatment volume estimate is larger than the estimate of 2,800 cubic yards cited in the 2002 ROD (U.S. EPA 2002), mostly as a result of contamination extending below the footprint of the building. Overall, the pre-design sampling concluded that the *ex situ* thermal soil remedy selected would require substantially more cost, effort and time than originally planned to achieve the remedial action objectives (RAO) for soils.

In October 2011, Illinois EPA completed five borings at Source Area 4, collecting soil and groundwater samples to evaluate ERH as a potential soil remedy. The evaluation concluded that contaminant, soil, and aquifer properties at Source Area 4 are conducive to ERH. Semi-volatile organic compound and total organic carbon concentrations are within ERH remediation values, the target zone is predominantly fine- to medium-grained sand, and most of the target zone is not saturated. In a January 10, 2012, Final Technical Memorandum, Illinois EPA concluded that ERH would be a more appropriate remedy than excavation and LTTD. The Memorandum states, in part, that adopting ERH is more appropriate than the *ex situ* thermal remedy of excavation and LTTD considering the depth of contamination, structural issues for the existing building, space constraints and site location within a residential neighborhood.<sup>1</sup>

ERH technology is specifically designed for sites with high concentrations of VOCs in the source area, where remediation is required under existing structures and when remediation must be achieved in a relatively short time frame. Source Area 4 meets all of these criteria and the ERH technology will help ensure that overall groundwater quality is restored quickly, allowing

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<sup>1</sup> ERH is an *in situ* thermal technology based on passing electrical current among electrodes placed in the subsurface. As the subsurface is resistively heated, contaminants transition to the vapor phase and are captured by a vapor recovery system. Maintaining a complete vacuum influence within the treatment zone is critical to ensure complete capture of the contaminant vapors. Following extraction, contaminant vapors are treated if necessary to meet regulatory emission limits prior to discharge to the atmosphere using granular activated carbon (GAC) and any NAPL is captured for off-site disposal.

more timely compliance with State of Illinois Class I Groundwater Standards. Currently, The City of Rockford, Illinois, and Winnebago County draw 100% of their water supply from groundwater through private, industrial and municipal supply wells. Therefore, any elimination of groundwater contamination source materials will ultimately assist in reestablishment of the groundwater to Class I groundwater standards.

#### **Source Area 4 Findings and Description of Significant Differences**

The following items are disadvantages associated with the soil excavation and LTTD remedy in the ROD, based on current knowledge and conditions. Almost all of these items contribute directly to increase the remediation cost and implementation time required above that estimated in the ROD.

##### **A. Problems with Soil Excavation and LTTD**

1. Primary source soil under the building is difficult to access and will either require alternate remediation, partial demolition and reconstruction of the building, or leaving some residual contamination in place.
2. Secondary source soil under the parking lot, limited to the smear zone, is overlain by approximately 30 feet of relatively uncontaminated material that must be excavated and stockpiled to access the contaminated material below.
3. Space limitations; the volume of soil to be excavated, treated, and stockpiled; and equipment staging areas dictate that the excavation be conducted in separate stages that increase time required to conduct the remedy.
4. Short-term risk to workers and residents caused by exposed contamination within open excavation.
5. Pallet business activities will be unable to operate for six to eight months.
6. Excavation footprint is inflexible to field changes due to space limitations and risk to existing building.
7. Excavation planned to a depth of 37 feet will require special sheeting and bracing systems that are time consuming and expensive to install.
8. To achieve an open excavation, free of cumbersome cross-lot bracing, tiebacks will be needed which would have to extend under the building and possibly beyond other property bounds on the site; special permitting to install tiebacks will be required.
9. Cross lot bracing, if used to avoid tie backs, will require special excavation techniques and double handling of material within the excavation.



10. Driving sheeting at the site will cause noise and vibrations which may be objectionable to nearby occupants; vibrations would have to be analyzed so as not to cause damage to surrounding properties.
11. Sheeting prohibits extending excavation to pursue contaminated soils outside of the set excavation, or even to confirm conditions in sidewall of excavation beyond the limits of the sheeting.
12. Pulling sheeting after the completion of backfilling and compaction will be difficult and could cause damage to surrounding buildings and utilities. Normally sheeting driven within the 1 vertical to 1 horizontal zone of influence is left in place. Leaving sheeting in place could potentially cause obstruction to future use of the site utilities and can sometimes create a barrier to normal groundwater flow, which could adversely impact currently operating leachate control system. Studies to determine redirected groundwater flow patterns will be necessary to assess any impact to the operating leachate containment system.
13. Any excavation or construction activities near the building are risky because of the building's questionable structural stability.
14. Significant continuous dewatering efforts with onsite treatment will be required during the period where the excavation is open below the groundwater table.

B. Benefits of performing *in situ* thermal soil remediation using ERH technology

1. Impact to health and safety of the public is less due to reduced vehicle traffic hauling contaminated soil, less air emissions and odors; less potential for public contact with the contaminants; shorter remediation time, etc.
2. Less impact on the business and the neighborhood.
3. Lower overall short-term risk to workers during construction because of significantly less heavy construction operations.
4. More effective than a partial building demolition where some contaminants will be left in place.
5. Less costly because there will be less handling of material (i.e., ex-situ with a dig and haul component compared to in-situ).
6. Less costly and more efficient because there will be no need to dewater the area of remediation.

## **Change in Remedy Execution**

The RD for Source Area 4 soil will require an overall change from the previous excavation and LTTD remedy to the in situ ERH remedy. Additionally, it will evaluate whether the system effluent will be contained and treated on site or at the existing leachate control unit system located near the site. The RD for the excavation and LTTD remedy was progressing to the 60% phase but was stopped because of the results of the pre-design pump test. Calculations were performed that indicated that the volume of groundwater that would have to be pumped and treated on site when the excavation was open below the water table would be prohibitive. The design for the ERH remedy will include the basis for design and associated work plans, specifications, drawings, and O&M plan. The design modification will also address site security and safety for the work.

The design will also specify strict monitoring and control of the ERH vapor recovery system to prevent the unwanted migration of contaminant vapors that could lead to vapor intrusion into commercial establishments and homes in the vicinity of the site. Although ERH creates contaminated vapors in the subsurface, it captures these vapors by design. Further, the lateral extent of the target zone that will be heated is not extensive and the only structure over it is a high bay garage with a door that is always open during working hours. Similar to radon problems, vapor intrusion is significantly induced by negative pressure within a closed structure caused by vent fans and appliances (e.g., clothes drier, hot water heater, and furnace) operating, which is not the case with this building. Because of the very open air nature of the building, any vapors that do happen to enter the space won't accumulate with the high-bay door that is always open. Finally, any NAPL at the source that is mobilized by the ERH heating will be captured by the groundwater treatment system that extracts groundwater from immediately downgradient of Source Area 4.

The Illinois EPA has determined that this is a significant change to the remedy at Source Area 4, but a change that does not fundamentally alter the remedy selected in the Operable Unit #3 ROD. The leachate containment remedy selected in the ROD and the soil remedy documented in this ESD remain protective of human health and the environment and continue to meet applicable or relevant and appropriate requirements (ARARs).

## **Rationale for Selection of this Change to the Remedy for Impacted Source Soils of Source Area 4**

Note that the Operable Unit #3 Source Area 4 decision was based on the nine decision-making criteria. These are:

### Threshold Criteria –

**1. Overall Protection of Human Health and the Environment** - This criterion addresses whether a remedy provides adequate protection of human health and the environment and

describes how risks posed through each exposure pathway are eliminated, reduced, or controlled through treatment or engineering/institutional controls.

**2. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)** - This criterion addresses whether a remedy will meet all of the ARARs of Federal and State environmental laws and/or justifies a waiver.

Primary Balancing Criteria – These criteria are used to weigh major tradeoffs among evaluated alternatives. They include:

**3. Long-Term Effectiveness and Permanence** – This criterion is concerned with the residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, after cleanup goals have been met.

**4. Reduction of Toxicity, Mobility or Volume through Treatment** – This criterion evaluates the degree to which hazardous substances are treated to reduce the toxicity, mobility, or volume.

Removal of VOCs from the contaminated soil via ERH constitutes the removal of a principal threat waste from the site, and the subsequent treatment of the removed vapors and effluent is considered treatment. Any NAPL removed from the soils is captured for off-site disposal and this is not considered treatment.

**5. Short-Term Effectiveness** – This criterion addresses the period of time needed to achieve protection and any adverse impacts on human health and the environment that may be posed during the construction and implementation period until cleanup goals are achieved.

**6. Implementability** – Implementability is the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a particular remedy.

**7. Cost** – Cost includes estimated capital and operation and maintenance costs, also expressed as net present worth costs.

The total estimated capital costs for implementing ERH for Source Area 4 soils is \$1,356,000. The O&M cost for ERH, assuming a 6 month operating period and on-site treatment of system vapors and effluent, is \$382,000. The total project cost is estimated to be \$1,728,000 (+/- 20 percent) and may vary depending on the actual length of system operation and the ultimate treatment of the vapors and effluent from the system.

Modifying Criteria – These criteria are usually taken into account after public comment is received on the proposed remedy. They include the following:

**8. State/Support Agency Acceptance** – This criterion reflects aspects of the preferred alternative and other alternatives that the support agency favors or objects to, and any specific comments regarding State of Illinois applicable ARARs or the proposed use of waivers.

**Support Agency Comments** - Illinois EPA is lead agency and U.S. EPA is the support agency for Source Area 4 of Operable Unit #3. U.S. EPA has indicated its approval of this remedial action revision.

**9. Community Acceptance** – This criterion reflects the public's general response to the remedy revision.

The revised remedy meets the threshold criteria of protection of human health and the environment, and compliance with ARARs. The revised remedy will be effective in the long term. The revised remedy will provide for less disruption to the neighborhood and existing structure and more treatment to reduce toxicity, mobility, and volume of hazardous substances than the originally selected remedy. The revised remedy has lower cost, greater short term effectiveness and is more readily implemented than the originally selected remedy. After approval of the ESD, a notice that briefly summarizes the ESD will be published in a newspaper of local circulation.

### **Standards to be Attained**

Remedial action objectives and remediation goals as set forth in the June 2002 Operable Unit #3 ROD are not altered by work proposed in this ESD.

### **Statutory Determinations**

The selected remedy satisfies the requirements of Section 121 of CERCLA, 42 U.S.C. Section 9621, which are to protect human health and the environment; comply with ARARs; be cost effective; utilize permanent solutions and alternate treatment technologies to the maximum extent practicable; and satisfy the preference for treatment as a principal element of the remedy.

The change to the remedy for impacted source soils of Source Area 4 as described in this ESD continues to meet CERCLA's expectation for treatment of principal threat waste because soil treatment actions remain the major component of the remedy. Therefore, Illinois EPA and US.EPA have determined that this change to the remedy for the impacted source soils of Source Area 4 satisfies CERCLA Section 121.

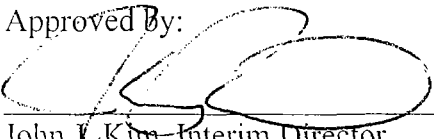
Although contaminated soil will be treated to levels that meet the remediation goals established in the June 2002 ROD, the accomplishment of the tasks described in this ESD will not result in conditions which would allow unrestricted use of this portion of the site because groundwater away from the ERH treatment zone will continue to be contaminated at concentrations greater than regulatory standards for some period of time. Consequently, Source Area 4 will remain

subject to inclusion in future five-year reviews for the site in accordance with CERCLA Section 121.

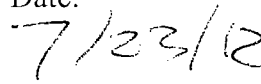
### **Public Participation Compliance**


Illinois EPA, working in coordination with U.S. EPA, shall make this explanation of significant differences and supporting information available to the public via the administrative record and the information repositories (noted elsewhere in this document). Illinois EPA will ensure that a notice that briefly summarizes the explanation of significant differences, and provides basic reason for such differences, is published in a newspaper of local circulation. By so doing, Illinois EPA will meet the public participation requirements of NCP Section 300.435(c)(2)(i).

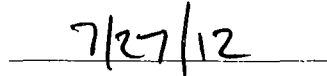
Approved By:

  
John J. Kim, Interim Director  
Illinois Environmental Protection Agency

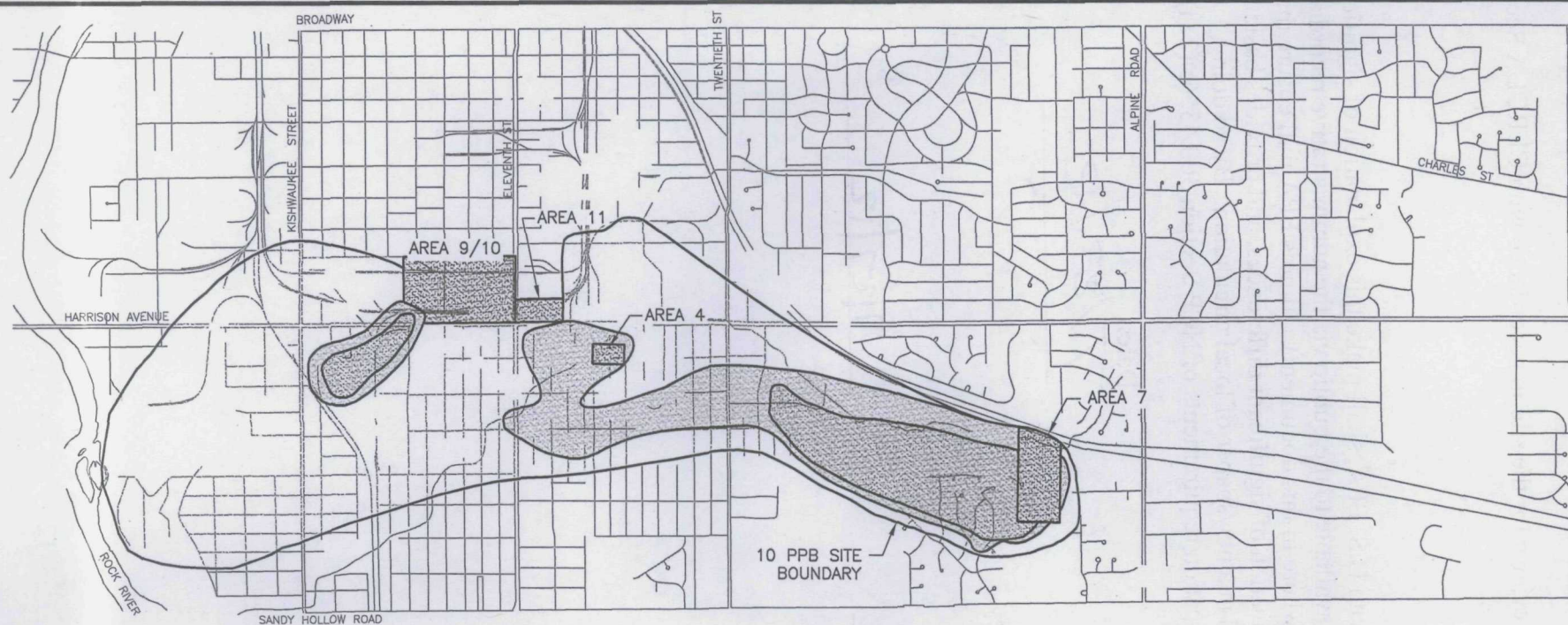
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


  
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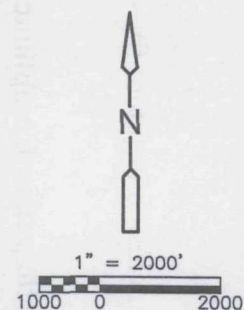
  
Richard C. Karl, Director  
Superfund Division  
U.S. EPA Region 5

  
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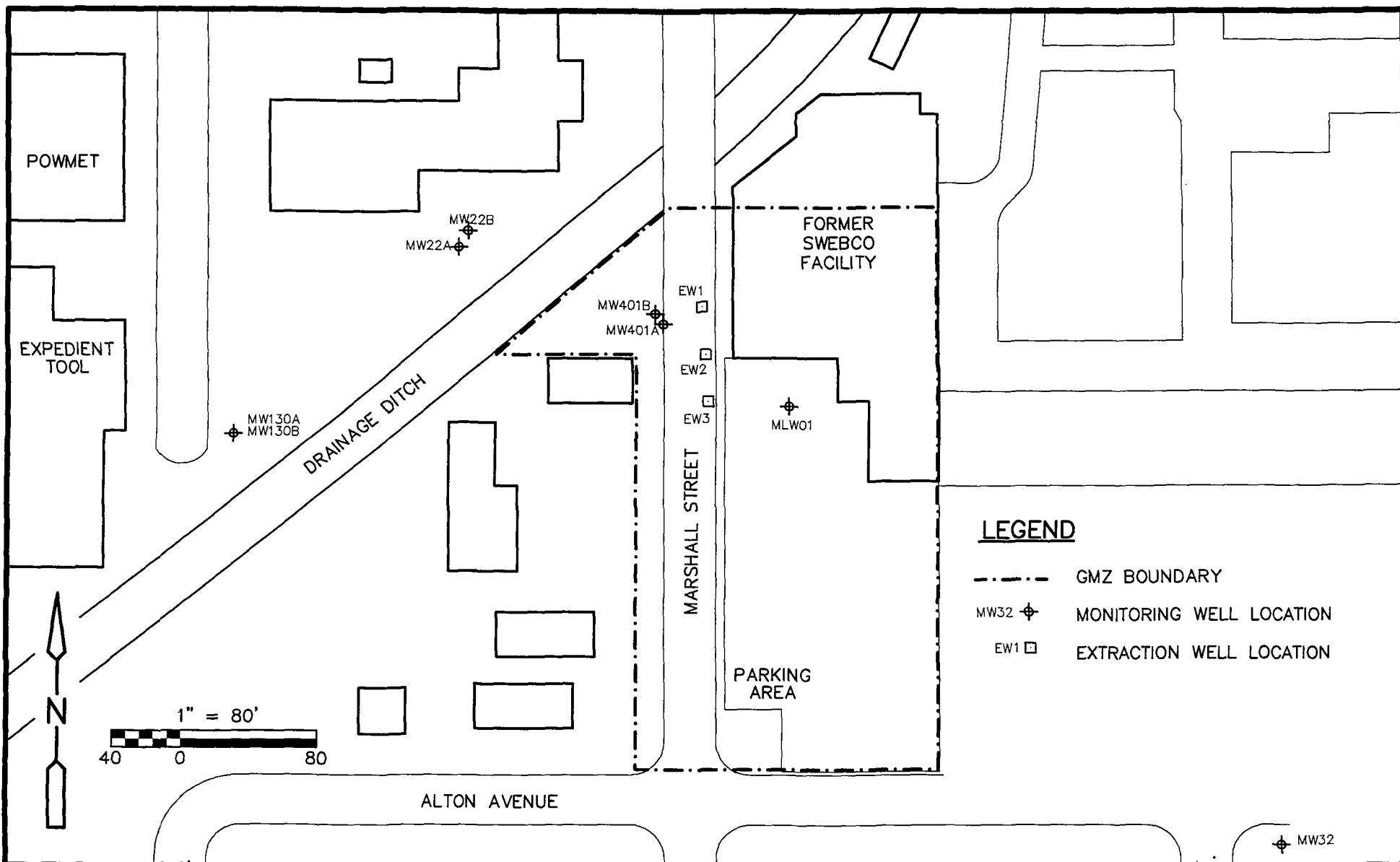


-  AREA OF CONCERN
-  TOTAL CHLORINATED VOCs > 10 ppb
-  TOTAL CHLORINATED VOCs > 100 ppb
-  TOTAL CHLORINATED VOCs > 1,000 ppb



**CDM  
Smith**

Figure 1  
 Southeast Rockford Groundwater Contamination Superfund Site  
 Rockford, IL



**CDM  
Smith**

SOUTHEAST ROCKFORD GROUNDWATER CONTAMINATION SUPERFUND SITE  
SOURCE CONTROL OPERABLE UNIT  
ROCKFORD, ILLINOIS

SOURCE AREA 4 LAYOUT

Figure No. 2